Author Index of Volume 189

Alexandrova, M. M., L5
Andrae, H., 209
Andreev, A. V., 187
Auffret, S., 9

Bakker, H., 113
Benedict, U., 205
Berry, F. J., 235
Bilyalov, Ya. R., L5
Blachnik, R., 209
Blasse, G., 259
Bodak, O. I., L11
Bonino, J. P., 151
Boutarek, N., 9
Bowen, P., 131
Bros, J. P., 17
Bulanova, M. V., 229
Bulyk, I. I., L27
Burtet Fabris, B., L23

Carpentier, J. L., 157
Castanet, R., 23
Cenzual, K., 221
Chabre, Y., 59
Chen, L., L31
Colucci, C. C., 45
Crosnier, M. P., 259

Dakhel, A. A., L9
Dancausse, J.-P., 205
Dellis, J. L., 157
Deublein, G., 175
Dinelli, G., L23
Ding, J., 83
Dirksen, G. J., 259
Dong, Y., L35
de Biasi, R. S., 201

El Amri, K., 151
Ellner, M., 245
Eremenko, V. N., 229

Filal, M., 157
Fischer, D. F., 37
Fontana, D., 263
Fraunberger, G., 123

Gama, S., 45
Gambino, M., 17
Gering, E., 205
Gerward, L., 205
Gillot, B., 151
Gladyshevskii, R. E., 221
Greaves, C., 235
Gribanov, A. V., L11
Grillo, M. L. N., 201
Gupta, K. P., 145
Gürler, R., 97

Harris, I. R., 131
Hayashi, T., 195
He, C., L31
Heathman, S., 205
Hilt, R. J., 269
Hiraoka, H., L1
Hoch, M., 17
Huggins, R. A., 175
Hulliger, F., 205

Ide, M., L1
Ishizawa, Y., L1
Ivanov, E., 117
Ivanov, V., L19

Janczak, J., 107
Jeżowski, A., 217
Johnson, T. R., 37

Kaczorowski, D., 217
Kammel, J., 1
Kek, S., 245
Khan, H. R., 139
Kim, W. W., 123
Klüver, E., 101
Kopyczok, J., 1
Kotroczo, V., 87
Koyama, T., 37
Krachler, R., 169
Kubiak, R., 107
Kuhlmann, U., 249
Kwon, H. W., 131

Labaki, L. C., 45
Lambert-Andron, B., 9
Latroche, M., 59
Lbibb, R., 23
Lee, S., 269
Li, L. F., L35
Liaw, B. Y., 175
Lissner, F., 69
Lobo, R. C., 235
Lung, C. W., L35

Madar, R., 9
Makhlouf, S. A., 117
Malaman, B., 49
Marella, M., L23
Martsenjuk, P. S., 229
McColm, I. J., 31, 87
McCormick, P. G., 83
Meyer, H.-J., 75
Mielke, A., 123
Mironov, V. S., 163
Misiorek, H., 217
Molinas, B., L23
Mucha, J. 217
Müller-Buschbaum, Hk., L15, L21, 101, 127, 191, 241

Naruse, Y., 195
Niedźwiedź, K., 141
Nowak, B., 141

Okońska-Kozłowska, I., 1
Okuno, K., 195
Otani, S., L1

Pannetier, J. 59
Parthé, E., 221
Pavlyuk, V. V., L11
Pecharsky, V. K., L11
Percheron-Guegan, A., 59
Perona-Silhol, N., 17
Peters, E., 101
Piacente, V., 263
Picot, J. C., 157
Pierre, J., 9
Piffard, Y., 259
Poinsignon, C., 59
Pouderoux, P., 151
Pratt, J. N., 97
Predel, B., 245

Raghavan, S., L35
Rath, M., L15, 127
Rebbeck, M., 87
Ribeiro, C. A., 45
Rosov, S. P., 163
Rousset, A., 151

Salamakha, P. S., L11
Scardala, P. 263
Schleid, T., 69, 75
Schlüter, D., L21
Schwetz, K. A., L11
Seropegin, Yu. D., L11
Sichevich, O. M., L27
Sologub, O. L., L11
Sonne, P., 191
Staun Olsen, J., 205
Stewart, G. R., 123
Strange, R., 235
Street, R., 83
Symiyama, K., 117
Suzuki, K., 117
Szytuła, A., L19

Tams, G., 241
Tarasov, E. N., 187
Tatyanin, E. V., L5
Tellier, P., 157
Tomaszczuk, N. I., L27

Uma Devi, M., 145

Venturini, G., 49
Vinokurova, L., L19
Vladkova, E. D., 67

Ward, J. M., 87
Welter, R., 49
Werheit, H., 249
Wokulska, K., 1

Xiong, L. Y., L35

Yamanaka, K., 195
Yang, H., 113
Yartys', V. A., L27

Zadvorkin, S. M., 187
Zhang, K., L31
Żogał, O. J., 141

Subject Index of Volume 189

Actinides
distribution of actinides in molten chloride salt/cadmium metal systems, 37
Aluminium
permeation behaviour of deuterium implanted into pure Al, 195
specific heat measurement on UAl_4, 123
the existence of a Co_3Al phase of the Cu_3Au structure type, 245

Ball milling
calculation of formation enthalpies of both the amorphous phase and the solid solution of a transition metal and a non-transition element, 113
Barium
crystal structure of $Ba_3SnFe_{10}O_{20}$, 191
Borides
compression study of U borides UB_2, UB_4 and UB_{12} by synchrotron XRD, 205
thermionic emission properties of RE added LaB_6 crystal cathodes, L1
Boron
distribution of C atoms on the B carbide structure elements, 249
study of Pr–Fe–B–Cu permanent magnets produced by upset forging of cast ingot, 131

Cadmium
distribution of actinides in molten chloride salt/cadmium metal systems, 37
the Cd–Ga–In–Sn–Zn liquid system, 17
Calcium tantalates
thermodynamics of the formation of high Ca tantalates from e.m.f. measurements, L39
Carbides
distribution of C atoms on the B carbide structure elements, 249
Cerium
crystal structure of the compound $Ce_2Pt_7Ge_4$, L11
crystallographic properties of $Ce(Si,Ge)_{2-x}$ solid solutions, 9
determination of the solid solubility of Ce in α-Fe by the positron annihilation technique, L35
Chemical vapour transport
growth of $Cu_{1-x}Ga_xCr_2Se_4$ single crystals by CVT and their electrical properties, 1
Chromium
growth of $Cu_{1-x}Ga_xCr_2Se_4$ single crystals by CVT and their electrical properties, 1
Cobalt
corrosion resistance in O of electrolytic Ni and Co phosphorus coatings, 151
Er_2RhSi_3 and R_2CoGa_3 (R = Y, Tb, Dy, Ho, Er, Tm, Yb) with Lu_2CoGa_3 type structure: new members of the AlB_2 structure family, 221
H absorption–desorption and crystallographic characteristics of $RCo_{3-x}Ga_x$ (R = Y, Gd; x = 0.6–1.2) intermetallics, L27
structural and magnetic properties of nanocrystalline b.c.c. Co particles obtained by leaching of mechanically alloyed Co–Al, 117
the existence of a Co_3Al phase of the Cu_3Au structure type, 245
Conductivity
electrical properties of thin Tb films, L9
Copper
500 °C isothermal section of the Ag–Cu–Nd (0–34 at.% Nd) phase diagram, L31
growth of $Cu_{1-x}Ga_xCr_2Se_4$ single crystals by CVT and their electrical properties, 1
high-field magnetization in $PrCu_2Si_2$, $PrCu_2Ge_2$, $TbCu_2Si_2$ and $DyCu_2Si_2$ compounds, L19
structural implications of O stoichiometry in $Eu_{1.3}Sr_{1.7}Cu_2O_{6-\delta}$, 235
synthesis and crystal structure of a mixed-valent sodium oxocuprate(I,II): $NaCu_2O_2$, 241
Corrosion
corrosion resistance in O of electrolytic Ni and Co phosphorus coatings, 151
Crystal fields
semiempirical crystal field calculations for f^N systems. IV: Intermediate crystal field effect in $5f^2$ configuration in the $NpO_2Cl_4^{3-}$ anion, 163

Deuterium
in situ neutron diffraction study of the behaviour of $LaNi_{4.5}Al_{0.5}D_z$ electrode during deuterium charge–discharge, 59
permeation behaviour of deuterium implanted into pure Al, 195
Dicarbides
transformation temperatures and hydrolysis rates of three series of dicarbide solid solutions: YC_2–HoC_2, YC_2–LuC_2 and GdC_2–ErC_2, 31
Dicyanobenzene
X-ray analysis of phthalocyanines formed in the reaction of Au–Cu and Au–Sn alloys with 1,2-dicyanobenzene, 107
Dysprosium
dysprosium–tin phase diagram, 229
information on $Ba_8Pt_4Ho_3O_{17.5}$ and $Ba_8Pt_4Dy_3O_{17.5}$, L21

Electrolytes
thermodynamic properties of the Ti–H system using molton salt electrolytes containing hydride ions, 175
Electron spin resonance
Fe concentration on the ESR spectrum of Fe^{3+} in rutile, 201
Europium
structural implications of O stoichiometry in $Eu_{1.3}Sr_{1.7}Cu_2O_{6-\delta}$, 235
EXAFS
structural implications of O stoichiometry in $Eu_{1.3}Sr_{1.7}Cu_2O_{6-\delta}$, 235

Faulting
thermodynamic calculation of the probability of stacking fault formation in b.c.c. Fe–Zn alloys, 67
Ferromagnetism
thermal conductivity of $UCuP_2$ and $UCuAs_2$ single crystals, 217

Gadolinium
H absorption–desorption and crystallographic characteristics of $RCo_{3-x}Ga_x$ (R = Y, Gd; $x = 0.6$–1.2) intermetallics, L27
Gallium
a new oxometallate with tridymite structure: $Ba_3Fe_2Ga_2Al_2O_{12}$, L15
Er_2RhSi_3 and R_2CoGa_3 (R = Y, Tb, Dy, Ho, Er, Tm, Yb) with Lu_2CoGa_3 type structure: new members of the AlB_2 structure family, 221
growth of $Cu_{1-x}Ga_4Cr_2Se_4$ single crystals by CVT and their electrical properties, 1
H absorption–desorption and crystallographic characteristics of $RCo_{3-x}Ga_x$ (R = Y, Gd; $x = 0.6$–1.2) intermetallics, L27
the Cd–Ga–In–Sn–Zn liquid system, 17
Germanium
crystal structure of the compound $Ce_2Pt_7Ge_4$, L11
crystallographic properties of $Ce(Si,Ge)_{2-x}$ solid solutions, 9
thermodynamic investigation of Pt–Ge and Pd–Ge binary alloys, 23
Glasses
suppression of the glassy solidification of the alloy $Pd_{77}Cu_6Si_{17}$ by the b.c.c. phase under high pressure, L5
Gold
X-ray analysis of phthalocyanines formed in the reaction of Au–Cu and Au–Sn alloys with 1,2-dicyanobenzene, 107
the existence of a Co_3Al phase of the Cu_3Au structure type, 245

Holmium
information on $Ba_8Pt_4Ho_3O_{17.5}$ and $Ba_8Pt_4Dy_3O_{17.5}$, L21
two new oxometallates of the $Ba_5Mn_4Ln_8O_{21}$ type: $Ba_5Mn_4Sm_8O_{21}$ and $Ba_5Mn_4Ho_8O_{21}$, 101
Hydrides
H absorption–desorption and crystallographic characteristics of $RCo_{3-x}Ga_x$ (R = Y, Gd; $x = 0.6$–1.2) intermetallics, L27
thermodynamic properties of the Ti–H system using molton salt electrolytes containing hydride ions, 175
Ti Knight shift in $Ti_{1-x}V_x$ ($0 \leqslant x \leqslant 0.65$) dihydrides, 141
Hydrogen
H-stabilized Y monoselenide
stable and metastable phases in the metal-rich Y–Zr–Si system and their H reactivity
Hydrolysis
transformation temperatures and hydrolysis rates of three series of dicarbide solid solutions: YC_2–HoC_2, YC_2–LuC_2 and GdC_2–ErC_2, 31

Indium
the Cd–Ga–In–Sn–Zn liquid system, 17
IR spectroscopy
metal sulphide-tetraphosphorusdekasulphide phase diagrams, 209

Iron
determination of the solid solubility of Ce in α-Fe by the positron annihilation technique, L35
Fe concentration on the ESR spectrum of Fe^{3+} in rutile, 201
structure and magnetic properties of mechanically alloyed Sm_xFe_{100-x} nitride, 83
thermodynamic calculation of the probability of stacking fault formation in b.c.c. Fe–Zn alloys, 67
crystal structure of $Ba_3SnFe_{10}O_{20}$, 191
Iron monoselenide
decomposition pressure and standard enthalpies of sublimation and of formation of Fe monoselenide, 263
Ising model
order–disorder in binary substitutional alloys: a simple Ising approach, 169

Kinetics
transformation temperatures and hydrolysis rates of three series of dicarbide solid solutions: YC_2–HoC_2, YC_2–LuC_2 and GdC_2–ErC_2, 31
Knight shift
Ti Knight shift in $Ti_{1-x}V_x$ ($0 \leqslant x \leqslant 0.65$) dihydrides, 141

Lanthanides
Er_2RhSi_3 and R_2CoGa_3 (R = Y, Tb, Dy, Ho, Er, Tm, Yb) with Lu_2CoGa_3 type structure: new members of the AlB_2 structure family, 221
magnetic properties of RFeSi (R = La–Sm, Gd–Dy) from susceptibility measurements and neutron diffraction studies, 49
structural implications of O stoichiometry in $Eu_{1.5}Sr_{1.7}Cu_2O_{6-\delta}$, 235
transformation temperatures and hydrolysis rates of three series of dicarbide solid solutions: YC_2–HoC_2, YC_2–LuC_2 and GdC_2–ErC_2, 31
information on $Ba_8Pt_4Ho_3O_{17.5}$ and $Ba_8Pt_4Dy_3O_{17.5}$, L21
two new oxometallates of the $Ba_5Mn_4Ln_8O_{21}$ type: $Ba_5Mn_4Sm_8O_{21}$ and $Ba_5Mn_4Ho_8O_{21}$, 101
Lanthanum
in situ neutron diffraction study of the behaviour of $LaNi_{4.5}Al_{0.5}D_x$ electrode during deuterium charge–discharge, 59
thermionic emission properties of RE added LaB_6 crystal cathodes, L1
Lasers
crystal structure of $Ba_3SnFe_{10}O_{20}$, 191
Leaching
structural and magnetic properties of nanocrystalline b.c.c. Co particles obtained by leaching of mechanically alloyed Co–Al, 117
Luminescence
luminescence of $K_2(NbO)_2Si_4O_{12}$, 259

Macrospirals
centimetre-size platelets grown from partially melted bulk $YBa_2Cu_3O_{7-\delta}$, L23
Magnetism
high-field magnetization in $PrCu_2Si_2$, $PrCu_2Ge_2$, $TbCu_2Si_2$ and $DyCu_2Si_2$ compounds, L19
magnetic properties of RFeSi (R = La–Sm, Gd–Dy) from susceptibility measurements and neutron diffraction studies, 49
phase characterization of $Fe_{17}Nd_2N_x$ samples with different N contents, 45

semiempirical crystal field calculations for f^N systems. IV: Intermediate crystal field effect in $5f^2$ configuration in the $NpO_2Cl_4^{3-}$ anion, 163
specific heat measurement on UAl_4, 123
structural and magnetic properties of nanocrystalline b.c.c. Co particles obtained by leaching of mechanically alloyed Co–Al, 117
structure and magnetic properties of mechanically alloyed Sm_xFe_{100-x} nitride, 83
Mechanical alloying
structural and magnetic properties of nanocrystalline b.c.c. Co particles obtained by leaching of mechanically alloyed Co–Al, 117
Misch metal
the misch metal–iron system, 145
Molybdenum
a computer assessment of the Mo–Rh phase diagram, 97

Neodymium
500 °C isothermal section of the Ag–Cu–Nd (0–34 at.% Nd) phase diagram, L31
phase characterization of $Fe_{17}Nd_2N_x$ samples with different Ni contents, 45
Neptunium
semiempirical crystal field calculations for f^N systems. IV: Intermediate crystal field effect in $5f^2$ configuration in the $NpO_2Cl_4^{3-}$ anion, 163
Neutron diffraction
in situ neutron diffraction study of the behaviour of $LaNi_{4.5}Al_{0.5}D_x$ electrode during deuterium charge–discharge, 59
magnetic properties of RFeSi (R = La–Sm, Gd–Dy) from susceptibility measurements and neutron diffraction studies, 49
Nickel
corrosion resistance in O of electrolytic Ni and Co phosphorus coatings, 151
in situ neutron diffraction study of the behaviour of $LaNi_{4.5}Al_{0.5}D_x$ electrode during deuterium charge–discharge, 59
Niobates
luminescence of $K_2(NbO)_2Si_4O_{12}$, 259
Nitrides
phase characterization of $Fe_{17}Nd_2N_x$ samples with different N contents, 45
structure and magnetic properties of mechanically alloyed Sm_xFe_{100-x} nitride, 83

Order–disorder transformation
order–disorder in binary substitutional alloys: a simple Ising approach, 169
Oxides
metal sulphide-tetraphosphorusdekasulphide phase diagrams, 209
two new oxometallates of the $Ba_5Mn_4Ln_8O_{21}$ type: $Ba_5Mn_4Sm_8O_{21}$ and $Ba_5Mn_4Ho_8O_{21}$, 101
Oxygen
corrosion resistance in O of electrolytic Ni and Co phosphorus coatings, 151

Palladium
suppression of the glassy solidification of the alloy $Pd_{77}Cu_6Si_{17}$ by the b.c.c. phase under high pressure, L5
thermodynamic investigation of Pt–Ge and Pd–Ge binary alloys, 23
Permanent magnets
study of Pr–Fe–B–Cu permanent magnets produced by upset forging of cast ingot, 131
Permeation
permeation behaviour of deuterium implanted into pure Al, 195
Phosphides
corrosion resistance in O of electrolytic Ni and Co phosphorus coatings, 151
Phthalocyanines
X-ray analysis of phthalocyanines formed in the reaction of Au–Cu and Au–Sn alloys with 1,2-dicyanobenzene, 107
Platelets
centimetre-size platelets grown from partially melted bulk $YBa_2Cu_3O_{7-\delta}$, L23
Platinum
crystal structure of the compound $Ce_2Pt_7Ge_4$, L11
structure defects and charge transport of BTa_2O_5 in thermodynamic equilibrium at high temperature, 157
thermodynamic investigation of Pt–Ge and Pd–Ge binary alloys, 23
information on $Ba_8Pt_4Ho_3O_{17.5}$ and $Ba_8Pt_4Dy_3O_{17.5}$, L21
Positron annihilation
determination of the solid solubility of Ce in α-Fe by the positron annihilation technique, L35
Praseodymium
study of Pr–Fe–B–Cu permanent magnets produced by upset forging of cast ingot, 131

Raman spectroscopy
metal sulphide-tetraphosphorusdekasulphide phase diagrams, 209
Rare earths
crystallographic properties of $Ce(Si,Ge)_{2-x}$ solid solutions, 9
determination of the solid solubility of Ce in α-Fe by the positron annihilation technique, L35
Er_2RhSi_3 and R_2CoGa_3 (R = Y, Tb, Dy, Ho, Er, Tm, Yb) with Lu_2CoGa_3 type structure: new members of the AlB_2 structure family, 221
dysprosium–tin phase diagram, 229
the misch metal–iron system, 145
thermionic emission properties of RE added LaB_6 crystal cathodes, L1
Rhodium
a computer assessment of the Mo–Rh phase diagram, 97
Rutile
Fe concentration on the ESR spectrum of Fe^{3+} in rutile, 201

Samarium
structure and magnetic properties of mechanically alloyed Sm_xFe_{100-x} nitride, 83
two new oxometallates of the $Ba_5Mn_4Ln_8O_{21}$ type: $Ba_5Mn_4Sm_8O_{21}$ and $Ba_5Mn_4Ho_8O_{21}$, 101
Scandium
crystal structure of Ba_2ScAlO_5 and $Sr_2Sc_{0.5}Al_{1.5}O_5$, 127
synthesis and structure of a new layer compound: $ScPS_4$, 269
Selenides
H-stabilized Y monoselenide, 75
Selenium
growth of $Cu_{1-x}Ga_xCr_2Se_4$ single crystals by CVT and their electrical properties, 1

Sesquisulphides
single crystals of F–Tm_2S_3 and T–Yb_2S_3, 69
Silicides
magnetic properties of RFeSi (R = La–Sm, Gd–Dy) from susceptibility measurements and neutron diffraction studies, 49
Silicon
crystallographic properties of $Ce(Si,Ge)_{2-x}$ solid solutions, 9
stable and metastable phases in the metal-rich Y–Zr–Si system and their H reactivity, 87
suppression of the glassy solidification of the alloy $Pd_{77}Cu_6Si_{17}$ by the b.c.c. phase under high pressure, L5
Silver
500 °C isothermal section of the Ag–Cu–Nd (0–34 at.% Nd) phase diagram, L31
Sodium
synthesis and crystal structure of a mixed-valent sodium oxocuprate(I,II): $NaCu_2O_2$, 241
Strontium
crystal structure of Ba_2ScAlO_5 and $Sr_2Sc_{0.5}Al_{1.5}O_5$, 127
Sulphides
metal sulphide-tetraphosphorusdekasulphide phase diagrams, 209

Tantalum
structure defects and charge transport of BTa_2O_5 in thermodynamic equilibrium at high temperature, 157
Terbium
electrical properties of thin Tb films, L9
Thermal conductivity
thermal conductivity of $UCuP_2$ and $UCuAs_2$ single crystals, 217
Thermal stability
H absorption–desorption and crystallographic characteristics of $RCo_{3-x}Ga_x$ (R = Y, Gd; x = 0.6–1.2) intermetallics, L27
Thermionic emission
thermionic emission properties of RE added LaB_6 crystal cathodes, L1
Thermodynamics
a computer assessment of the Mo–Rh phase diagram, 97
calculation of formation enthalpies of both the amorphous phase and the solid solution of a transition metal and a non-transition element, 113
decomposition pressure and standard enthalpies of sublimation and of formation of Fe monoselenide, 263
thermodynamic properties of the Ti–H system using molton salt electrolytes containing hydride ions, 175
specific heat measurement on UAl_4, 123
the Cd–Ga–In–Sn–Zn liquid system, 17
thermodynamic investigation of Pt–Ge and Pd–Ge binary alloys, 23
thermodynamics of the formation of high Ca tantalates from e.m.f. measurements L39
Thin films
electrical properties of thin Tb films, L9
Thulium
single crystals of F–Tm_2S_3 and T–Yb_2S_3, 69
Tin
dysprosium–tin phase diagram, 229
crystal structure of $Ba_3SnFe_{10}O_{20}$, 191
Titanium
thermodynamic properties of the Ti–H system using molton salt electrolytes containing hydride ions, 175
Ti Knight shift in $Ti_{1-x}V_x$ ($0 \leqslant x \leqslant 0.65$) dihydrides, 141
Transuranic elements
distribution of actinides in molten chloride salt/cadmium metal systems, 37

Upset forging
study of Pr–Fe–B–Cu permanent magnets produced by upset forging of cast ingot, 131
Uranium
compression study of U borides UB_2, UB_4 and UB_{12} by synchrotron XRD, 205
distribution of actinides in molten chloride salt/cadmium metal systems, 37
specific heat measurement on UAl_4, 123
thermal conductivity of $UCuP_2$ and $UCuAs_2$ single crystals, 217

X-ray diffraction
500 °C isothermal section of the Ag–Cu–Nd (0–34 at.% Nd) phase diagram, L31
compression study of U borides UB_2, UB_4 and UB_{12} by synchrotron XRD, 205
synthesis and structure of a new layer compound: $ScPS_4$, 269
luminescence of $K_2(NbO)_2Si_4O_{12}$, 259

Ytterbium
single crystals of F–Tm_2S_3 and T–Yb_2S_3, 69
Yttrium
centimetre-size platelets grown from partially melted bulk $YBa_2Cu_3O_{7-\delta}$, L23
H absorption–desorption and crystallographic characteristics of $RCo_{3-x}Ga_x$ (R = Y, Gd; x = 0.6–1.2) intermetallics, L27
H-stabilized Y monoselenide, 75
stable and metastable phases in the metal-rich Y–Zr–Si system and their H reactivity, 87

Zinc
thermodynamic calculation of the probability of stacking fault formation in b.c.c. Fe–Zn alloys, 67
Zirconium
stable and metastable phases in the metal-rich Y–Zr–Si system and their H reactivity, 87